

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A method of reclaiming silicon wafers, comprising:

in the following order,

a film removal process;

a heating/removal process;

a polishing process; and

a cleaning process;

wherein the heating/removal process is between the film removal process and the polishing process,

wherein the heating/removal process comprises (i) heating the silicon wafer at 150-300 °C for 20 minutes to 5 hours and (ii) a chemical process that comprises removing a surface part of the silicon wafer by etching the top surface of the silicon wafer with a solution comprising one or more of an alkaline hydroxide and an alkaline carbonate to a depth of about 1 μm .

Claim 2 (Previously Presented): The method of reclaiming silicon wafers according to claim 1, wherein the heating/removal process further comprises a mechanical removal process.

Claims 3-4 (Canceled).

Claim 5 (Previously Presented): The method of reclaiming silicon wafers according to claim 1, wherein the method comprises both

an immersion process comprising chemically processing the silicon wafer with a chemical processing liquid; and

the heating/removal process comprising heating the silicon wafer at 150-300 °C for 20 minutes to 5 hours and removing a surface part of the silicon wafer between the film removal process and the polishing process.

Claim 6 (Previously Presented): The method of reclaiming silicon wafers according to claim 5, wherein the chemical processing liquid comprises:

a hydrogen peroxide aqueous solution; a mixed solution of a hydrogen peroxide aqueous solution, an ammonia aqueous solution, and water;

a mixed solution of a hydrogen peroxide aqueous solution, hydrochloric acid, and water; alkaline hydroxide aqueous solution; or

an alkaline carbonate aqueous solution.

Claim 7 (Previously Presented): The method of reclaiming silicon wafers according to claim 5, wherein the heating/removal process comprises a mechanical removal process.

Claim 8 (Previously Presented): The method of reclaiming silicon wafers according to claim 5, wherein the heating/removal process comprises a chemical removal process.

Claim 9 (Previously Presented): The method of reclaiming silicon wafers according to claim 8, wherein the chemical removal process is performed using alkaline hydroxides and/or alkaline carbonates.

Claim 10 (Previously Presented): The method of reclaiming silicon wafers according to claim 6, wherein the heating/removal process comprises a mechanical removal process.

Claim 11 (Previously Presented): The method of reclaiming silicon wafers according to claim 6, wherein the heating/removal process comprises a chemical removal process.

Claim 12 (Previously Presented): The method of reclaiming silicon wafers according to claim 11, wherein the chemical removal is performed using alkaline hydroxides and/or alkaline carbonates.

Claim 13 (Previously Presented): The method of reclaiming silicon wafers according to claim 12, wherein the alkaline hydroxide and/or carbonate are selected from a group consisting of potassium hydroxide, potassium carbonate, sodium hydroxide, sodium carbonate, and quaternary alkyl ammonium hydroxides.

Claim 14 (Previously Presented): The method according to claim 1, wherein the heating/removal process does not form any oxygen donors.

Claim 15 (Previously Presented): The method according to claim 1, wherein the heating/removal process is carried out in air.

Claim 16 (Previously Presented): The method according to claim 1, wherein the maximum temperature is 300°C.

Claim 17 (Previously Presented): The method according to claim 1, wherein the heating/removal process is carried out to provide a silicon wafer having the same specific resistance of a virgin silicon wafer.

Claim 18 (Previously Presented): The method according to claim 1, wherein the heating/removal process does not vary the specific resistance of a P-type or N-type silicon wafer.

Claim 19 (Previously Presented): The method according to claim 1, further comprising:

one or more of (i) carrying out monitoring of a semiconductor chip manufacturing process with the silicon wafer and (ii) setting up one or more operating conditions of a semiconductor fabrication machine with the silicon wafer, before the film removal process.

Claim 20 (Previously Presented): The method according to claim 1, wherein the silicon wafers are testing wafers.

Claim 21 (Previously Presented): The method according to claim 1, wherein the method is carried out to reclaim the silicon wafer without Cu contamination.

Claim 22 (Previously Presented): The method according to claim 1, wherein the method is carried out to reclaim the silicon wafer.

Claim 23 (Previously Presented): The method of reclaiming silicon wafers according to claim 1, wherein the top surface of the silicon wafer is etched with a solution comprising an alkaline hydroxide.

Claim 24 (Previously Presented): The method of reclaiming silicon wafers according to claim 1, wherein the top surface of the silicon wafer is etched with a solution comprising an alkaline carbonate.

Claims 25-26 (Canceled).

Claim 27 (Previously Presented): The method of reclaiming silicon wafers according to claim 1, wherein the chemical process of the heating/removal process further comprises:
top surface cleaning the silicon wafer with an aqueous solution comprising HF and H_2O_2 after the etching.

Claim 28 (Previously Presented): The method of reclaiming a silicon oxide wafer according to claim 27, wherein the Cu concentration of the silicon wafer after the top surface cleaning is no more than 2×10^{12} atom/cm³.

Claim 29 (New): The method of claim 1, further comprising contacting the top surface of the silicon wafer with at least one of SC1 and SC2 liquid after the film removal process and before the heating/removal process.

Claim 30 (New): The method of claim 1, wherein the only chemical process of the heating/removal process is immersing the silicon wafer in the solution comprising one or more of an alkaline hydroxide and an alkaline carbonate.